

Table 16: Detailed Costs for Alternative 6

Channel Costs

Segment	Length (ft)	Sideslopes	Slope (ft/ft)	Top Width (ft)	Bottom Width (ft)	Design Depth (ft)	Q (cfs)	Velocity (fps)	Freeboard (ft)	ROW Width (ft)	Channel Excavated Volume (cy)	Channel Excavation Unit Cost (\$/cy)	Maintenance Road (sy)	Maintenance Road Unit Cost (\$/sy)	Landscape Unit Cost (\$/sf)	Landscape Cost	Land Acquisition (acre)	Land Acquisition Cost (\$/acre)	Total Channel Costs
Western Canal Channel (East)	2825	5:1	0.0020	70	10	6	400	3.36	2.0	115	6409	\$6.00	7533	\$7.40	\$1.50	\$487,313	7.5	\$27,000	\$782,882
Western Canal Channel (West)	1805	5:1	0.0020	70	10	6	400	3.36	2.0	115	4095	\$6.00	4813	\$7.40	\$1.50	\$311,363	4.8	\$27,000	\$500,213
Carver Road to Estrella Drive	3960	5:1	0.0060	80	10	7	1601	7.20	1.3	125	10481	\$6.00	10560	\$7.40	\$1.50	\$742,500	11.4	\$27,000	\$1,190,350
67th Ave (Baseline Road to Southern Avenue)	7060	5:1	0.0015	60	10	5	205	2.54	1.9	105	13347	\$6.00	18827	\$7.40	\$1.50	\$1,111,950	17.0	\$27,000	\$1,790,835
NOTE: Includes channel top width, 24ft maintenance road, and embankment transition.													NOTE: Cost based on trail surfacing.			NOTE: Does not include site amenities or signage.			\$4,264,280

Culvert Costs

ID: Location, Crossing	Number of Crossings	Design Q (cfs)	Length (ft)	Slope	Material / Type	Number of Barrels	Diameter/Height	Width	Unit Cost	Pipe/Box Culvert Cost	Inlet Headwall Unit Cost	Outlet Headwall Unit Cost	Total Culvert Costs
Carver Road to Estrella Drive	3	1601	110	0.0050	CBC	4	7	10	\$2,050.00	\$676,500.00	\$20,300	\$31,250	\$831,150
67th Ave (Channel or Storm Drain)	3	205	110	0.0050	CBC	2	4	6	\$700.00	\$231,000.00	\$8,125	\$12,500	\$292,875
Western Canal Channel (East)	2	400	110	0.0050	CBC	3	5	6	\$1,175.00	\$258,500.00	\$10,100	\$15,600	\$309,900
Western Canal Channel (West)	2	400	110	0.0050	CBC	3	5	6	\$1,175.00	\$258,500.00	\$10,100	\$15,600	\$309,900
													\$1,743,825

Detention Basins Costs

Location	Storage Volume (Acre-ft)	Depth (ft)	Top Area (acre)	Bottom Area (acre)	Excavated Volume (cy)	Excavation Unit Cost (\$/cy)	ROW Width (ft)	Landscape Unit Cost (\$/sf)	Landscape Cost	Land Acquisition (acre)	Land Acquisition Cost (\$/acre)	Total Cost
51st Ave & Baseline	88	9	25	3.3	155000	\$6.00	NOTE	1	\$1,272,656	30	\$27,000	\$3,012,656
47th Ave & Elliot	27	6	10	3.8	46200	\$6.00	"	1	\$551,760	13	\$27,000	\$1,179,960
47th Ave & Estrella	187	14	30	2.45	318000	\$6.00	"	1	\$1,507,968	35	\$27,000	\$4,360,968
NOTE: Assume 44ft wide all around basin to accommodate 24ft maintenance road and embankment transition.												\$8,553,584

Storm Drain Costs

Segment	Diameter (in)	Material	Length (ft)	Unit Cost (\$/ft)	Total Storm Drain Costs
67th Ave	84	RGRCP	6212	\$250.00	\$1,553,000
Baseline	48	RGRCP	2750	\$150.00	\$412,500
51st Avenue Storm Drain (Dobbins to Baseline)	144	RGRCP	4720	\$700.00	\$3,304,000
Dobbins Road Storm Drain (43rd to 47th)	132	RGRCP	2626	\$610.00	\$1,601,860
Dobbins Road Storm Drain (47th to 51st)	132	RGRCP	2597	\$610.00	\$1,584,170
47th Avenue Storm Drain (Olney to Dobbins)	36	RGRCP	3360	\$105.00	\$352,800
Estrella	36	RGRCP	4556	\$105.00	\$478,380
					\$1,965,500

Total Costs

Flood Control Feature	30% Cost Contingency	Total Cost
Channel Costs	\$1,279,284	\$5,543,564
Culvert Costs	\$523,148	\$2,266,973
Storm Drain Costs	\$589,650	\$2,555,150
Basin Costs	\$2,566,075	\$11,119,659
		\$21,485,345